Wildlife Habitat

The focus of the wildlife program under the Coos Bay District RMP has been wildlife species inventory and monitoring (including Survey and Manage), marbled murrelet protocol surveys for timber sale and other project clearances, western snowy plover management, formal consultation with the U.S. Fish and Wildlife Service (USFWS), and the monitoring of snags and down wood. Additionally, the Wildlife Program on Coos Bay District is working to expand emphasis on active resource stewardship and restoration in addition to supporting other programs. Biologists are looking for opportunities, fostering partnerships and planning for restoration projects. Biologists are integral members on NEPA planning teams, watershed analyses, and LSR Assessments.

Green tree retention

RMP direction is to retain six to eight green conifer trees per acre in the General Forest Management Area and 12 to 18 green conifers per acre in the Connectivity/Diversity Blocks. The retained trees are to be distributed in variable patterns to contribute to stand diversity. Selected conifers should be representative of pre-harvest species and size composition, but be of sufficient size and condition to survive harvest and site preparation treatments and continue growing through the next rotation.

In FY 2000, the Umpqua Resource Area did not accomplish any post-harvest green tree monitoring. The Myrtlewood Resource Area completed surveys on about 69 acres for wildlife tree retention in FY 2000. Monitoring results in Resource Areas are still being analyzed.

Snag and Snag recruitment

Snag retention guidelines for regeneration harvest on Matrix lands are based upon the abundance of suitable nesting structures for primary cavity nesting birds. At the completion of harvest and site preparation activities, each sale unit must retain at a minimum sufficient habitat to support primary cavity nesting birds at the forty- percent population level. For the primary cavity nesting birds on Coos Bay District, this equates to a minimum of 1.5 (all decay classes) snags per acre, 11 inches DBH or larger. Snag retention goals must be met on average areas no larger than 40 acres. If existing snags are insufficient to meet these requirements, additional green trees 11 inches DBH or greater must be retained through harvest and site preparation to offset the deficit. These additional trees are then topped or treated as necessary to create snag habitat.

The District completed a monitoring plan and database for wildlife trees and snags in FY 97. The plan has landscape, pre-project, post-project, harvest unit monitoring through time, salvage, and snag modeling sections.

In FY 2000, the Umpqua Resource Area completed 32 acres of pre- or post-harvest snag surveys or monitoring. The Myrtlewood Resource Area completed surveys on approximately 20 acres of pre-harvest snag surveys and 69 acres of post-harvest snag monitoring. Monitoring results have

not been analyzed to date.

The Myrtlewood Resource Area successfully competed for Jobs-in-the-Woods (JITW) funding to create snags in a deficient portion (about 1,000 acres) of the District (Sandy Creek area). A contract was awarded and tree selection began in FY 2000. Snag creation will begin in FY 2001.

Coarse woody debris retention and recruitment

Guidelines in the Coos Bay District RMP require that a minimum of 120 linear feet per acre of decay class 1 and 2 logs that are 16 inches or greater in diameter and 16 feet or greater in length. These logs must be retained and well distributed following regeneration harvest on Matrix lands.

A District down log monitoring plan and database were completed in 1998 to provide standard and consistent procedures for monitoring down log abundance, condition and distribution on lands administered by the Coos Bay District. The Myrtlewood Resource Area has completed down log monitoring at the project level on 144 acres. Monitoring results have not been analyzed to date.

Nest Sites, Activity Centers, Special Habitats and Rookeries

Osprey

No regular monitoring of these nest sites is conducted. No monitoring was accomplished in FY 2000.

Great Blue Heron

A great blue heron and great egret rookery is located on a 3-acre area of the Coos Bay North Spit. The rookery has been monitored annually each spring since 1996. This effort is in cooperation with the Oregon Department of Fish and Wildlife's (ODFW) heron survey program. The site is thought to be the northern most breeding site for great egrets on the Pacific Coast. In 2000, no nests were observed. The Spruce Reach Island rookery was not monitored.

Waterfowl

Fifty-eight wood duck boxes were monitored and maintained at the Dean Creek Elk Viewing area and other District sites



Aluetian Canada Goose

Purple Martins

In April of 2000, 20 new nest boxes were installed. Fifteen were added to pilings off the BLM boat ramp in the same area as the 9 older boxes (for a total of 24 on the Coos Bay North Spit) and 5 boxes were put up on two pilings in the bay directly behind the US Army Corps of Engineers (COE) office near downtown Coos Bay. Six of the 24 boxes on the North Spit were subsequently used by purple martins and none of the 5 behind the COE office were used. These 5 boxes will be removed in they are not used during the 2001 breeding season. Boxes are cleaned and maintained each fall by Coos Bay BLM personnel.

Coos Bay BLM personnel also checked boxes placed on pilings in the bay off the north end of Millicoma Marsh in October of 2000. Two of those 7 boxes were used by nesting purple martins. This area may well be a more attractive location for the martins (more sheltered and perhaps more food). BLM will continue to monitor all boxes in cooperation with the local Audubon Society. This information will provide a complete picture of how many purple martins are nesting in the bay, and where they are nesting.

Mourning Doves

BLM biologists participated in a statewide survey of mourning doves in cooperation with the USFWS. One transect route was surveyed in May 2000. Three mourning doves were heard and one was observed.

Neotropical Migrant Birds

Surveys this year marked the fifth year of monitoring 250 acres for neo-tropical migrant bird species composition and relative abundance to evaluate potential impacts of visitor use at New River Area of Critical Environmental Concern (ACEC). This monitoring is scheduled for a five-year period to evaluate changes over time, but may continue beyond 2000 to better correlate with visitor use data that was not collected over the last five years. Water levels were extremely high all season, several of the survey stations points were under water the entire season (but were still monitored).

To date, the surveys are providing considerable information on both migratory and resident bird use in the New River Area. For instance, both Allen's and Rufous hummingbirds have been observed breeding in the area. This is now the southernmost record of Rufous hummingbirds breeding and the northernmost record for breeding Allen's hummingbirds. A new species added this season- the Vesper Sparrow marks the eightieth breeding species recorded at New River ACEC. This is the only known site along the Oregon Coast that they breed (several singing males were noted over the course of the season which indicates an attempt to breed).

Other rarities discovered during the migration: a common grackle (there are very few Oregon records, this was not a breeding bird), black swifts (they migrate through here to their breeding grounds in northern Washington and British Columbia), (a rare bird species in Oregon with only one known nesting site in the Oregon Cascades), and bank swallow (a very rare finding in Coos County as this species breeds regularly in Eastern Oregon). Bald Eagles were seen along the river on several occasions, as were Peregrine Falcons. Aleutian Canada geese were seen in the

hundreds (and thousands) passing overhead to feed in the vicinity of Storm Ranch in the Spring (late April/early May).

The area continues to attract enormous quantities of shorebirds during the Spring migration (late April/ early May), since water levels were so high, they were not stopping as much as in past years (they feed on the open mudflats when the water levels are lower- 2 years ago when river levels were much lower).

Bats

Under the JITW program, five bat boxes were placed in campgrounds and in timber sale units in the District. These boxes will provide interim habitat in areas where natural roost sites are lacking. Monitoring of 20 bat boxes took place in FY 2000.

Elk Habitat

The Dean Creek Elk Viewing Area is a 1,095 acre watchable wildlife site that is jointly managed by BLM, ODFW and Dean Creek Wildlife, Inc. This year approximately 250 acres of meadows were mowed with BLM equipment and labor to improve elk forage. Another 8 acres were plowed and disked. Four of these acres were reseeded with annual rye grass and 4 acres were left fallow for observation sake. This work was accomplished to control Reed canary grass. The technique is based on recent research that has found an effective way to control this invasive species is to weaken the rhizomes through annual plowing. Early results showed substantial impact to the grass which was less vigorous and shorter. The Reed canary grass grew poorly the following spring, allowing other plants such as clover a chance to establish and grow.

BLM personnel also removed 185 thistle plants to prevent thistle invasion across the area. In FY 2000, the District completed two Challenge Cost Share Projects with Rocky Mountain Elk Foundation and ODFW. These projects resulted in the seeding of 12 acres and fertilization of 90 acres of meadow to improve elk forage. BLM was able to accomplish much of the pasture management at a reduced cost through the acquisition of a free used plow that was refurbished for a relatively small amount.

A Challenge Cost Share project with Rocky Mountain Elk Foundation and ODFW resulted in better drainage of the east-end pasture through a retrofit of a culvert to eliminate plugging of the ditch by beavers. A portion of the funds from this challenge cost share will also be used to create a vegetative screen on Highway 138 while creating an open water/wetland mitigation site. Also in 2000, Ducks Unlimited completed a topographical study and provided a suggested management plan. BLM has been working with several partners and agencies to reach agreement on measures that will increase drainage in some areas while diversifying habitats where possible. With an emphasis on the Roosevelt Elk section, (ROD p. 29) 1.35 miles of road were fully decommissioned by the Myrtlewood Field Office (East Fork Coquille fifth field). An additional 12.9 miles of road were closed in the same area.

Late-Successional Reserve Habitat Improvement

Two IDTs were initiated in FY 99 to conduct an NEPA analysis of density management and other treatments within LSR #261 (Tioga Creek and East Fork Coquille subwatersheds). The teams completed draft environmental assessments in FY 2000. These proposed projects are expected to help set these stands on a faster trajectory toward old growth characteristics.

Special Status Species/Habitat, Wildlife

Survey and Manage/Protection Buffer note:

The Coos Bay District has been able to implement the management/action direction associated with Survey and Manage/Protection Buffer species through FY 2000. The adaptive management application of experience gained in implementing this management/action direction has resulted in the consideration of possible adjustments. This information in the APS for Survey and Manage/Protection Buffer species is not meant to be comprehensive or exhaustive.

Survey and Manage/Protection Buffer Species:

Mollusks

The District contains habitat for three mollusk species listed in Appendix C of the RMP (*Megomhix hemphilli, Prophysoan coeruleum,* and *Prophysoan dubium*). Surveys for these species began in 1998. District-wide, 400 acres were surveyed to protocol with another 135 acres surveyed one time only (some first visits for protocol surveys were conducted in FY 99). As a result of these surveys, 47 sites were discovered. A total of 4,010 acres have now been surveyed District-wide for mollusks since 1998 bringing a total of 860 known sites into our database.

Red Tree Vole

The District has been assessing red tree vole habitat for all projects using established protocol. In FY 2000, 1,269 acres were surveyed in support of the timber sale program. As a result of these surveys, 478 red tree vole sites were found. Confirmation through tree climbing was accomplished on 843 trees. Climbing, under the supervision of biologists, was performed by Coos Bay District staff and contractors through the Coquille Watershed Association under the JITW program. Of the trees climbed a total of 829 nest trees were found; 212 were confirmed active, 266 were confirmed inactive and 351 were confirmed non-red tree vole nest trees. Based on these findings, there were on average 0.65 nest trees per acre.

Del Norte Salamander

Surveys for Del Norte salamanders began in 1996 for ground disturbing activities occurring within the species range. All newly discovered sites for this species were protected from disturbance activities. Approximately 12,653 acres have been assessed for since 1997 (with 920 acres completed in 2000). A total of 53 locations have been discovered to date (0 in 2000) and the sites have been buffered according to management recommendations.

Terrestrial Threatened/Endangered Species

Consultation under Section 7 of the Endangered Species Act (ESA) occurs on all activities proposed within habitat of listed species. An interagency Level 1 Review Team of biologists from the BLM, USFWS, and the Bureau of Indian Affairs (BIA) is involved early to assist in the analysis and, if needed, modification of project plans and Biological Assessments.

A large portion of the District wildlife program's resources are directed toward gathering and interpreting information to ensure compliance with ESA and the land use plan. A total of 13 consultations were conducted in FY 2000. These consultations included snowy plover management, permits and R/W agreements, fish habitat restoration, and a recreation project. Three of the projects were cancelled (by BLM or a permitee) over the course of the consultation process. In addition, biologists reviewed at least 26 road use, guyline or tailhold permits to evaluate if consultation was necessary.

Northern Spotted Owl

Most of the District was surveyed for spotted owls during the 1990-1994 demographic study. There are approximately 97 known sites on the District, 75 percent of which are protected in mapped LSRs. The majority of the remaining sites have 100-acre cores (unmapped LSRs) established around them. Most of the best habitat occurs in the LSRs, as do the best owl sites (i.e. the ones with the most available habitat, stable occupancy, and successful reproduction). While most sites contain less than 40 percent of their home range radius in suitable habitat, nearly half of the protected sites contain more than 30 percent habitat. Spotted owl sites in LSRs have been consistently occupied and producing young. The rate of annual population change on the District noted during the demographic study (seven percent annual decline) is similar to other studies suggesting that conservation measures at a scale of the species range are appropriate at the scale of the District as well. Since the Matrix contains relatively few spotted owl sites and 80 percent of the federal land base is protected, we expect the population to stabilize in the network of reserves.

Although the Coos Bay District did not conduct any owl surveys in FY 2000, surveys were completed on District lands through cooperation with the Pacific Northwest Forest and Range Experiment Station (PNW), Roseburg BLM, Oregon State University (OSU), the Coquille Indian Tribe, Weyerhaeuser Co., and The Timber Company. Data were shared in order to maintain current owl data records for Coos Bay District lands.

Bald Eagle

There are 8 bald eagle territories on District land and an additional 19 territories on other ownerships within the District boundary. All ownerships within the District boundary can potentially support eagle-nesting territories. At present, there are no known bald eagle roost sites on BLM lands in the Coos Bay District, but there could potentially be roosts on all ownerships within the District boundaries. In FY 2000, biologists monitored nesting at five sites. Coos Bay District biologists also provided funding and participated in a new survey to monitor nesting bald eagles in the Umpqua and Coos basins. The monitoring was in partnership

with the Oregon Eagle Foundation, OSU, U.S. Forest Service and ODFW.

Marbled Murrelet

Surveys for murrelets have been conducted on the Coos Bay District since 1989 and intensive survey efforts began in 1993. About 18.5 percent (18,455 acres) of suitable murrelet habitat on District has been surveyed to Pacific Seabird Group protocol for murrelets. This percentage is lower than the figure reported in 1999 due to a redefinition of protocol surveys. Throughout the District, 149 occupied sites have been found. Most are in the northern part of the District where marbled murrelet activity is generally higher. There are currently 99,970 acres of suitable marbled murrelet habitat within the District, 99 percent of which is in Zone 1 (within 35 miles of the coast). Table 9 summarizes murrelet survey efforts through 2000.

Western Snowy Plover

The Coos Bay North Spit and New River ACEC provide both breeding and wintering habitat for western snowy plovers. Plovers are also known to occur on five other locations (non BLM lands) within the Coos Bay District. BLM District lands currently provide 274 acres of suitable habitat for the snowy plover and manage another 118 acres of plover habitat on COE lands. The North Spit continues to be the most productive nesting habitat on the Oregon Coast.

Work continued in the Natural Resource Damage Assessment realm (NRDA) of the 1999 New Carissa shipwreck that occurred adjacent to prime plover habitat on the Coos Bay North Spit. Data was collected during the 1999 breeding season and following winter was summarized in a report prepared by Oregon Natural Heritage Program. This information will be used in negotiations with the Responsible Party at the conclusion of damage assessment.



Newly Hatched Snowy Plovers

Table 9. Acres of Murrelet Habitat, Acres Surveyed to Proto 2000	ocol, and Acres	s Occupie	d as of
Area	Cumulative Acreage Prior to 2000	Acreage Added in 2000	Total Acreage to Date
Murrelet Habitat (MMH Theme):	N/A	N/A	N/A
Total Murrelet Habitat Coos Bay District (Does not Includes Coquille Tribe Lands)	99,004 1	0	99,9702
Murrelet Habitat Surveyed to Protocol: Note: Survey areas must have completed all requirements of the 2 year protocol.			
Myrtlewood Field Office	N/A	454	N/A
Umpqua Field Office	N/A	750	N/A
Total Murrelet Habitat Surveyed to Protocol Coos Bay District	18,001 ³	454	18,455
Percent of Total Murrelet Habitat Surveyed to Protocol			18.5
Murrelet Occupied LSR Acreage: NOTE: These acres are not necessarily newly protected areas. Some was approximately 60 percent of Coos Bay District lands are in Riparian Re	Ü	wl core arec	us (LSR) and
Myrtlewood Field Office	7,668	1,750	9,418 4
Umpqua Field Office	5,528	0	5,528 5
Total Murrelet Occupied Acreage Coos Bay District	13,196	1,750	14,946

Abbreviations used in this Table

N/A = Not Available

TEC = Turnstone Environmental Consultants, Inc., contract surveys

 $MRA = Myrtlewood\ Field\ Office,\ in\ house$

URA = Umpqua Field Office

- From the FY 1999-2000 Timber Sale Biological Assessment (C98-01)
- Acreage is calculated from GIS marbled murrelet habitat coverage cbmmh98.
- From the FY 1999-2000 Timber Sale Biological Assessment (C98-01) dated 10 August 1998, page 14. Includes adjustments in FY's 97, 98 and 99.
- Acreage is calculated from marbled murrelet occupied site summary in Visual dBASE.
- Acreage is estimated from GIS coverage cbmmocc00.

Actions in FY 2000 included:

- Restored 15 over-wash areas to total approximately 80 acres at New River ACEC.
- Disked 130 acres of encroaching beachgrass to restore and maintain nesting habitat on the Coos Bay North Spit.
- Monitored nesting success at three BLM nesting sites through a cooperative effort with Oregon Natural Heritage Program, USFS, USFWS, ODFW, and COE.
- Completed a winter count on about 17.5 miles of beach.
- Participated on the Oregon Western Snowy Plover Working Team (the chairperson has been a

- BLM representative for the past four years).
- Provided the lead role in NRDA for the New Carissa Incident.
- Placed signs and ropes on approximately four miles of beach to direct beach users away from plover nesting sites.
- Hired an interpretative specialist to monitor compliance and educate visitors at the Floras Lake portion of New River ACEC. The specialist described closure restrictions and explained reasons to visitors.
- Created a variety of educational materials under a challenge cost share project with Oregon Parks and Recreation Department. Materials included "table tents", book marks and postcards for use at local restaurants, hotels and visitor centers.
- Provided a leadership role in organizing a field tour for high-level managers responsible for management of lands containing snowy plover habitat. The tour increased awareness for many and provided an opportunity to focus on and coordinate strategies for recovery.

Other Species of Concern

Peregrine Falcon

Within the Coos Bay District, there are no known peregrine falcon nest sites on BLM land; there is one site on Fish and Wildlife Service land and another suspected on State land. In total, there may be 6-8 other nest sites on all ownerships within the District boundary. No peregrine falcons nest sites were inventoried in 2000.

Townsend's Big-eared Bat

Townsend's big-eared bats were monitored as part of the overall bat monitoring as previously described under Special habitats.

Environmental Education

District Wildlife Biologists were involved with a variety of environmental education activities in 2000. They organized a local event to celebrate International Migratory Bird Day. The event, held at a local mall, included displays, slide shows, crafts, a live peregrine falcon and bird walks. An estimated 440 people were contacted during this event. Biologists also participated in the "Tsalila" Watershed Festival and School Programs. The program included classroom presentations and field trips for Reedsport schools. Lessons learned from the school program were presented at the three-day festival along with hands-on learning opportunities and "edutainment". The program focuses on healthy watersheds, local native American traditions within these watersheds and restoration of watersheds in the Umpqua basin.

Wildlife biologists also made presentations to area school groups, civic organizations and campground visitors. Topic included bats, snowy plovers, birds and habitat restoration.

Survey and Manage/Protection Buffer and Special Status Species (Plants)

Special Status and Survey and Manage/Protection Buffer note:

The District continued to implement BLM Policy 6840 (Special Status Species) and Survey and Manage/Protection Buffer standard and guidelines in FY 2000. This included surveying for these species prior to habitat-disturbing activities, surveying in Late-Successional Reserves, entering species location and survey information in the Interagency Species Management System (ISMS) database, designing field level management for known sites based on current management recommendations, and monitoring the effectiveness of our proposed management. The information in this program summary for these species is not intended to be comprehensive.

Survey and Manage/Protection Buffer Species

Surveys for Survey and Manage/Protection Buffer species were conducted according to approved protocols on approximately 1,800 acres in FY 2000 for fungi, vascular plants, lichens and bryophytes. Many new locations of these species, mostly fungi, were located as a result of these surveys (Table 10).

Table 10. Number of Known Sites by Taxa Groups of Survey and Manage/Protection Buffer Plant Species (some species are counted in more than one category). Sites cumulative since 1994.

	Status ¹						
Taxa Group (# documented species)	Component 1	Component 2	Component 3	Component 4	Protection Buffer		
Fungi	77	2	264	127	182		
Lichens	71	0	87	452	0		
Bryophytes	52	47	8	62	38		
Vascular Plants	1	1	0	0	0		

Abbreviations used in this Table

Component 1 = Manage Known Sites
Component 2 = Survey Prior to Group

Component 2 = Survey Prior to Ground Disturbing Activities

Component 3 = Extensive Surveys
Component 4 = General Regional Surveys
Protection Ruffer Species.

PB = Protection Buffer Species. Some species may in more than one category

In addition to the project acres surveyed, the District completed a contract where 5,200 acres of Late-Successional Reserves were surveyed for lichens, bryophytes, and terrestrial mollusks. These surveys began in October 1999 and were completed in January 2000. This project also located many new locations of Survey and Manage species. These locations are included in Table 10.

Special Status Plant Species

The District continues to conduct clearances for special status plant species prior to project implementation and management to reduce the likelihood of the species becoming listed under the Endangered Species Act. Currently there are 50 documented special status plant species known to occur on BLM-managed lands within the District (Table 11). The majority of these locations are in special areas and unique habitats (coastal dunes, serpentine meadows). The District has been involved in several proactive projects with numerous partners (federal, state, and private organizations) looking at methods to recover federal and state listed plant species. A plant species new to Oregon (*Atriplex levcophylla*) was discovered within New River ACEC in September, 2000.

Table 11. Number of sites by taxa groups of special status plant species (some species are included in more than one list).

	Status ¹					
Taxa Group (# documented species)	FL	SL	FC	BS	AS	TS
Fungi (6)	0	0	0	0	0	12
Lichens (4)	0	0	0	1	3	1
Bryophytes (2)	0	0	0	0	14	0
Vascular Plants (51)	2	8	0	22	34	49

Abbreviations used in this Table

FL = Federally Listed Endangered or Threatened

SL = State Listed Endangered or Threatened

FC = Federal Candidate

BS = Bureau Sensitive

AS = Bureau Assessment Species

 $\Gamma S = Bureau Tracking Species$

Endangered Plant Species - The District continued involvement in species wide monitoring, seed collection, and habitat-enhancement efforts for the federally endangered western lily (*Lilium occidentale*). We continued our partnership with the Center for Plant Conservation (Berry Botanic Garden) on experimentally re-introducing this species. This was the fourth year of monitoring the population.

The District also continued efforts with the State of Oregon to introduce the state endangered pink sand verbena (*Abronia umbellata* ssp. *brevifolia*) at New River and North Spit ACECs.

Candidate and BLM Sensitive Species - The District continued monitoring efforts for salt marsh-bird's-beak in the Coos Bay estuary. Population levels in 2000 decreased from previous years, most likely due to an extended dry period during seed germination. Salt marsh habitat continues to re-colonize within the areas on the bayside road that have been closed to vehicles.





Fairy Bells Western Trillium

Port Orford Cedar (POC)

In FY 2000, the extensive aerial photo survey of dead or dying POC that was completed last year is being digitized into the existing GIS inventory data of BLM lands.

Port Orford cedar trees near roads and streams on the Coos Bay District are at a high risk for infection by the root disease caused by *Phytophthora lateralis*. In the roadside areas that are actively managed to limit the spread of *Phytophthora lateralis* the District continues to seasonally wash vehicles, sanitize roadside POC, close selected roads, summer haul on dirt roads, and exclude the cutting of POC boughs.